

WHAT IS CLAIMED IS:

1. An apparatus for controlling a scanner, wherein the scanner includes a plurality of motors and sensors, the apparatus comprising:

5 a set of multiplexes connected to the sensors for receiving a sensor data from the sensors;

a set of shift registers connected respectively to output of each corresponding multiplexes;

10 a set of motors connected respectively to the set of the shift registers, wherein the set of shift registers received a motor control data, and the motor control data is feedback from the shift registers to the multiplexes; and

a set of latch registers connected respectively to the set of shift registers for latching the output data from the shift registers;

2. The apparatus of claim 1, wherein the shift register is a flip-flop device.

15 3. The apparatus of claim 1, wherein the latch register further outputs the latched data to the respective motor.

4. A method of controlling a scanner, the scanner having a set of motors and having a set of sensors, the method comprising:

20 receiving a motor control data from a plurality of registers;
driving the corresponding motor according to the motor control data;
receiving a sensor data from the registers by a set of shift registers, wherein the motor control data is feedback to a set of multiplexes;

selecting one of data from the sensor data or the motor control data in the multiplexes;

transmitting the selected data to the corresponding shift registers, wherein the

selected data is transmitted to the latch registers;

latching the selected data in the latch registers;

transmitting the latched data to the corresponding sensors to control the corresponding motors.

- 5 5. The method of claim 4, wherein the corresponding motors is controlled when a data-detecting signal is produced, the motor control data are transmitted to the multiplexes.

6. The method of claim 5, wherein the data-detecting signal is produced when the sensor data are transmitted to registers.